

REMARKS

STATUS OF CLAIMS

Claims 1-19 are pending.

Claim 4 is objected to for a typographical error. Claim 4 is amended to correct the typographical error. Withdrawal of the objection is respectfully requested.

Claims 5, 6, 14 and 18 are rejected under 35 USC 112, second paragraph, for indefiniteness.

Claims 1, 8, 13 are rejected under 35 USC 112, first paragraph, for lack of enablement.

Claims 1-3 and 16 are rejected under 35 USC 102(e) as being anticipated by Brilla (US Patent No. 6,389,276). Page 4, item 5 of the Action.

Claims 7, 11, 15, 19 are rejected under 35 USC 102(e) as being anticipated by Bowater (US Patent No. 6,282,269). Page 5, item 6 of the Action.

Claims 4-6 and 17-18 are rejected under 35 USC 103(a) as being unpatentable over Brilla in view of Sashihara (US Patent No. 6,434,405).

Claims 8-10 and 12-14 are rejected under 35 USC 103(a) as being unpatentable over Bowater and in view of Sashihara.

Claims 4, 6, 7, 14, 15, 18, and 19 are amended, and, thus, claims 1-19 remain pending for reconsideration, which is respectfully requested.

The foregoing rejections are traversed. No new matter has been added in this Amendment.

35 USC 112, 1st PARAGRAPH, REJECTIONS

Claims 1, 8, and 13 are rejected for not being enabled because the specification does not disclose HRR (the claimed message service information) is updated by the message storage system (page 3, item 4 of the Action). However, paragraph 27 clearly discloses that "HRR provides both location information of the message storage system node 112 and message service information." Message service information can be, for example, subscriber mailbox information, MWI data, or etc. (paragraph 27). Further, paragraph 37 clearly discloses an HRR update control flow, in which "the message storage 112 sends an HRR Update message 200 to update the HRR 114 database," for example, to update the MWI information. Therefore, claims 1, 8 and 13 are enabled according to 35 USC 112, 1st paragraph.

Withdrawal of the rejection of claims 1, 8 and 13 under 35 USC 112, 1st paragraph, is respectfully requested.

35 USC 112, 2nd PARAGRAPH, REJECTIONS

Claims 5, 6, 14 and 18 are rejected under 35 USC 112, 2nd paragraph, for indefiniteness.

Regarding the rejection of claim 5, that “different services” are not clearly defined, the Applicant asserts that one skilled in the art would understand “different services” according to paragraphs 26 and 52 (i.e., different message servers providing different information, or different type messages, as a service to a user). Withdrawal of the rejection of claim 5 is requested.

Regarding the rejection of claims 6, 14, and 18, these claims are amended taking into consideration the Examiner’s comments. In particular, subscriber mailbox information is information relating to a subscriber’s “message mailbox.” Withdrawal of the rejection of claims 6, 14 and 18 is requested.

CLAIMED INVENTION

In contrast to the relied upon references, the present invention establishes “a data channel between the portable wireless telephone and the message storage system” to “process” a message (claim 1). Accordingly, the portable wireless phone 100 is “processing a message ... via a data channel” (claim 1). More particularly, the present invention is directed to a data-network-based portable wireless phone messaging system, such as a data-network-based portable wireless phone voice messaging system. For example, the invention is directed to a system that enables a mobile telephone to communicate over a packet-switched data network with a voicemail system (VMS) and “process a message ... via a data channel” (for example, play or delete messages or update message information over a data channel). Therefore, the present invention establishes a data channel between a portable wireless telephone and a messaging system to process a message by the portable wireless phone.

To process a voice message stored on voicemail systems, prior art systems require users to place telephone calls to the voicemail systems, which require circuit-switched voice connections between the users’ mobile wireless telephones and the voicemail systems. However, it is often difficult to establish or maintain continuous circuit-switched connections with mobile wireless telephones due to signal strength or propagation limitations, network congestion, etc. Therefore, one benefit of the invention is that because data can be sent over a data

channel (i.e., a packet-switched data network) even if a connection is not continuously available between the handset and the VMS (i.e. because a data channel connection can tolerate intermittent outages, but a circuit-switched voice connection cannot tolerate such outages), the inventive system enables the mobile phone to fetch or store messages over the data channel, even if a voice connection cannot be established between the phone and the VMS. More particularly, as a benefit, message processing, including message management, may not require establishment of a real-time communication connection as in a typical circuit-switch voice channel connection.

Therefore, in case of voice messages, the present invention's portable wireless phone can fetch and store (download) a message via a data channel, and then play the message to a user. The present invention's phone can also then, under command of the user, instruct the VMS to save or delete the message, via the data channel. Similarly, the present invention's phone can record and store a message or greeting from the user, and then, for example, later send (upload) the message or greeting via the data channel to the VMS and instruct the VMS to store or forward the message or greeting.

PRIOR ART

Brilla

Independent claims 1 and 16 are rejected over Brilla. Independent claim 4 is rejected over Brilla in view of Sashihara.

Brilla discloses a system that delivers a new message indication, not the message, to a mobile user when the new message is left on a landline telephone's VMS. Brilla's system includes a "message platform" 112 between the VMS and the mobile telephone system (col. 7, lines 40-62 and FIG. 2). When the message platform 112 receives a new message indication from the VMS, the message platform 112 sends an e-mail address to a corresponding e-mail address (Col. 7, line 63 to col. 8, line 25). The system uses an SMS server 130 to receive this e-mail message and page the mobile phone (Col. 8, lines 26-39; col. 9, lines 54-67; col. 10, line 50 to col. 11, line 14).

However, Brilla does not disclose or suggest the present invention's patentably distinguishing feature, as recited in independent claims 1, 4, 8, 12, and 16, using recitation of claim 1 as an example:

1. A process, by which a portable wireless telephone
controls

...
processing a message responsive to the message service
information via a data channel between the portable wireless
telephone and the message storage system according to the
message service information; and

updating the message service information in the resource
database by the message storage system according to the
processing via a data channel between the resource database and
the message storage system.

The present invention establishes a data channel connection between the portable
wireless telephone 100 and HRR 114 as well as between the portable wireless telephone 100
and the message storage system 112a-n. Accordingly, the portable wireless phone 100 is
“processing a message ... via a data channel.” See FIGS. 2 and 3 of the Application regarding
a data channel connection between the base station 104 and the HRR 114, thereby also
allowing a data channel connection between the portable wireless phone 100 and the message
storage systems 112a-n, via the packet-switched data network 110. However, Brilla uses the
SS-7 Network connection between the base station (messaging switch center) 136 and the SMS
130 only for providing paging services to the portable wireless telephone.

The claimed invention differs from Brilla as follows:

(1) Although Brilla discloses notifying the portable wireless telephone of a voice
message, such notification is done via a paging service through the SS-7 Network (Brilla, FIG. 3,
and column 9, lines 54-67 and column 10, line 50 to column 11, line 26). In particular, a page
simply displays a numeric or text notification message on the user's mobile telephone to notify
the user that a new message has been recorded by the VMS. A page text notification differs
from “processing a message ... via a data channel between the portable wireless telephone and
the message storage system.” In FIGS. 2 and 3 of Brilla, the portable wireless phone 122 via
the MSC 136 is not in communication with the VMS 110 over the Internet 124. In Brilla, the
portable wireless phone 122 communicates with a short message server (SMS) 130, which is
connected via the Internet 124 to the VMS 110. Brilla's configuration simply provides new voice
mail notification from a separate voice mail system to a mobile unit (column 6, lines 54-66).
Unlike a user of the present invention, a user of Brilla's system must place a telephone call via a

circuit-switched voice channel to the VMS 110 to process the message.

Therefore, the portable wireless telephone of Brilla does not "process a message ... via a data channel between the portable wireless telephone and the message storage system." According to the present invention, by "processing a message ... via a data channel," the portable wireless telephone 100 can play, record, view, etc., or otherwise manage messages by transmitting/receiving data over the data channel (the packet-switched data network 110) between the portable wireless telephone 100 and the message storage systems 112a-n. Brilla does not disclose or suggest allowing the portable wireless telephone 122 to "process a message" (for example, play, record, view, etc.) via the SS-7 Network or via the paging service, which undermines the Examiner's rationale in page 5 of the Action that Brilla's paging service, or that Brilla's portable wireless phone user can instantly "access" the stored voice message, is similar to the present invention's data channel between the portable wireless phone 100 and the VMS 112a-n for "processing a message ... via the data channel" (FIGS. 2 and 3 of the Application). In Brilla the portable wireless telephone 122 would process a voice message via a circuit-switched voice channel as a typical voice message processing system. More particularly, for example in case of voice messaging, Brilla does not disclose any way for the user to "process" the voice message over a data channel between the portable wireless telephone and the VMS, such as by listening to it, deleting it or forwarding it. Nor does Brilla disclose any way for the user to record a greeting or message on the mobile phone and send the message or greeting to the VMS via the data channel.

(2) Further, Brilla does not disclose or suggest updating a resource database (HRR 114) accessible to/by the portable wireless phone 100 based upon message processing via the data channel. First, Brilla does not disclose or suggest updating of the HLR 150. Second, even if Brilla updated the HLR 150, the update would not be based upon message "processing ... via a data channel between the portable wireless telephone and the message storage system," because in Brilla, the portable wireless telephone 122 would process a voice message via a circuit-switched voice channel as a typical voice message processing system. The present invention can provide, for example, a data-network-based portable wireless phone VMS. However, Brilla distinguishes its invention from such data-network-based portable wireless phone VMS in column 10, lines 18-36.

Sashihara relates to transmitting and receiving e-mail messages, by using a portable wireless phone, between an email terminal and an email server (column 1, lines 7-11). Sashihara does not relate to a portable wireless phone "processing a message ... via a data channel between the portable wireless telephone and the message storage system,"

undermining the Examiner's rationale that a combined system of Brilla and Sashihara disclose the present invention.

Bowater

Independent claims 7, 11, 15, and 19 are rejected over Bowater. Independent claims 8 and 12 are rejected over Bowater in view of Sashihara.

Bowater relates to Internet telephony and discloses a method of leaving voice mail in a voice message system on the Internet.

Claims 7, 15 and 19 are amended to further emphasize the patentably distinguishing features of the present invention. In contrast to Bowater, the present invention as recited in amended claims 7, 11, 15 and 19, using the recitation of amended claim 7 as an example, provides "controlling from a portable wireless telephone processing of a voice message on a voice message storage system using a data channel with the voice message storage system." The present invention establishes a data channel connection between the portable wireless phone and the voice message storage system. In response to Examiner's assertion on page 6 of the Action, Bowater does not relate to portable wireless telephones, and, further, a combined system of Bowater and Sashihara does not disclose or suggest the present invention. Therefore, withdrawal of the rejection of independent claims 7, 8, 11, 12, 15, and 19 over Bowater is respectfully requested.

CONCLUSION

In view of the amendments and remarks presented above, it is respectfully submitted that the application is in condition for allowance, and withdrawal of the rejection of claims 1-19 and allowance of claims 1-19 is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 4, 6, 7, 14, 15, 18, and 19 are **AMENDED** as follows.

Recitation of all pending claims is provided for reference convenience.

1. (ORIGINAL) A process, by which a portable wireless telephone controls processing of a message on a message storage system, comprising:
 - receiving in the portable wireless telephone message service information from a resource database via a data channel between the portable wireless telephone and the resource database;
 - processing a message responsive to the message service information via a data channel between the portable wireless telephone and the message storage system according to the message service information; and
 - updating the message service information in the resource database by the message storage system according to the processing via a data channel between the resource database and the message storage system.
2. (ORIGINAL) The process according to claim 1, wherein the message service information comprises location data of the message storage system and subscriber mailbox information.
3. (ORIGINAL) The process according to claim 1, wherein the message includes data selected from a group consisting of voice, video, audio, image, text or data.
4. (ONCE AMENDED) A process, by which a portable wireless telephone controls processing of a message on a message storage system, comprising:
 - creating a resource database storing message service information;
 - receiving in the portable wireless telephone the message service information from the resource database via a data channel between the portable wireless telephone and the resource database;
 - storing a message in the portable wireless telephone without establishing a voice or data channel with the message storage system [without establishing a voice or data channel with the message storage system];

processing a message responsive to the message service information via a data channel between the portable wireless telephone and the message storage system according to the message service information; and

updating the message service information in the resource database by the message storage system according to the processing via a data channel between the resource database and the message storage system.

5. (ORIGINAL) A process according to claim 4, further comprising associating message storage systems providing different services to the portable wireless telephone.

6. (ONCE AMENDED) The process according to claim 4, wherein the message service information comprises location data of the message storage system and subscriber message mailbox information.

7. (ONCE AMENDED) A process, comprising:
controlling from a portable wireless telephone processing of a voice message on a voice message storage system using a data channel with the voice message storage system.

8. (ORIGINAL) A process, comprising:
recording a message for a recipient subscriber in a portable wireless telephone without establishing a voice or data channel with the message storage system;

querying address of a recipient-subscriber message storage system from a resource database via a data channel between the portable wireless telephone and the resource database;

transmitting the message to the recipient-subscriber message storage system via a data channel between the portable wireless telephone and the recipient-subscriber message storage system;

storing the transmitted message in a mailbox for the recipient subscriber in the recipient-subscriber message storage system;

updating message service information of the recipient subscriber in the resource database by the recipient-subscriber message storage system according to the storing in the mailbox via a data channel between the resource database and the message storage system;

alerting automatically a recipient-subscriber portable wireless telephone with the message service information by the resource database via a data channel between the resource

database and the portable wireless telephone;

establishing a data channel between the recipient-subscriber portable wireless telephone and the recipient-subscriber message storage system;

processing the message in the recipient-subscriber portable wireless telephone via the data channel between the recipient-subscriber portable wireless telephone and the recipient-subscriber message storage system; and

updating the message service information of the recipient subscriber in the resource database by the recipient-subscriber message storage system according to the processing in the recipient-subscriber portable wireless telephone via a data channel between the resource database and the message storage system.

9. (ORIGINAL) The process according to claim 8, wherein the processing further comprises:

receiving data packets corresponding to the message from the recipient-subscriber message storage system via the data channel; and

presenting the message to the recipient subscriber on the recipient-subscriber portable wireless telephone.

10. (ORIGINAL) The process according to claim 8, wherein the transmitting and receiving further comprises:

transmitting and receiving data units comprising data packets corresponding to the message, identification information of the message, total number of the data packets information and data packet sequence number information; and

determining whether to retransmit data packets;

retransmitting data packets responsive to the determining using the identification information, the total number of the data packets and the data packet sequence number information.

11. (ORIGINAL) A system, comprising:

message storage systems storing voice messages; and

a portable wireless telephone comprising a processor to control processing of a voice message on the message storage systems using a data channel with the message storage systems.

12. (ORIGINAL) A system, comprising:
message storage systems storing messages;
a resource database storing message service information relating to the messages; and
a portable wireless telephone comprising a storage unit and a processor programmed to receive the message service information from the resource database via a data channel between the portable wireless telephone and the resource database, to store a message in the storage unit without establishing a voice or data channel with the message storage system, and to process a message responsive to the message service information via a data channel between the portable wireless telephone and the message storage system according to the message service information.

13. (ORIGINAL) The system according to claim 12, wherein the message storage systems update the message service information in the resource database via a data channel between the message storage systems and the resource database.

14. (ONCE AMENDED) The system according to claim 12, wherein the message service information comprises location data of the message storage systems and subscriber message mailbox information.

15. (ONCE AMENDED) A system, comprising:
a portable wireless telephone;
message storage systems storing voice messages; and
means for controlling processing voice messages on the message storage systems using a data channel [with]between the portable wireless telephone and the message storage systems.

16. (ORIGINAL) A portable wireless telephone, comprising a processor programmed to receive message service information from a resource database via a data channel between the portable wireless telephone and the resource database, and to process a message responsive to the message service information via a data channel between the portable wireless telephone and a message storage system according to the message service information.

17. (ORIGINAL) The portable wireless telephone according to claim 16, further comprising a storage unit and wherein the processor is programmed to store the message in the

storage unit without establishing a voice or data channel with the message storage system, as the process to automatically transmit and receive the message to/from the message storage system via the data channel based upon the message service information and present the message to a subscriber using the portable wireless telephone.

18. (ONCE AMENDED) The portable wireless telephone according to claim 17, wherein the message service information comprises location data of the message storage system and subscriber message mailbox information.

19. (ONCE AMENDED) A portable wireless telephone, comprising a processor programmed to establish a data channel with message storage systems storing voice messages, and to control processing of a voice message on the message storage systems using the data channel.